UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/686,446	10/15/2003	Gunner D. Danneels	P17634	6854

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EXAMINER
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ART UNIT	PAPER NUMBER
2688	

DATE MAILED: 01/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>31 October 2005</u>.

2a)☒ This action is **FINAL.**   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-30</u> is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-30</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☐ All   b)☐ Some * c)☐ None of:

　　　1.☐ Certified copies of the priority documents have been received.

　　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
　　Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
　　Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2.   Claims 14-15 and 28 are rejected under 35 U.S.C. 102(e) as being anticipated by

U.S. Patent Application Publication No. 2004/0068666 to Tosey.

Tosey discloses all the elements of independent claim 14, including a processor

(Figure 1, element 100); and a wireless wide area network module (Figure 1, element

102) coupled to the processor (Figure 1), the WWAN module at least operatively

responsive to receiving WWAN signals to awaken (paragraph 20) the processor when

the processor is in a low power mode (paragraphs 17).

Tosey also discloses all the elements of claim 15, including wherein the WWAN

module is normally on. See paragraph 16.

The rejection of claim 14 is hereby incorporated. Tosey discloses all the steps of

independent claim 28, including, a method, comprising: transporting WWAN signals

from a source to a normally-on wireless wide area network module in a computer

system (paragraph 16), the WWAN module coupling to a processor (Figure 1) and

including a wakeup signal to awaken (paragraph 20) the processor from a low power

mode (paragraph 17).

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 1, 6-9, 16-19, and 22-26 are rejected under 35 U.S.C. 102(e) as

anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Tosey.

The rejections of claims 14-15 and 28 are hereby incorporated. Tosey teaches all

the steps of independent claims 1 and 9, and dependent claims 18 and 19, including a

method or a machine readable medium having stored thereon data representing

instructions comprising receiving a wireless wide area network signal (paragraph 20);

filtering information included in the WWAN signal to determine if an action is to be

performed by a processor (this is inherent in that the WWAN module wakes up the

processor or alternatively, one of ordinary skill in the art at the time the invention was

made would have understood that the WWAN module was filtering and determining

because it ultimately wakes up the processor in response to receiving a network event);

and when the action is to be performed by the processor (paragraph 20), and the

processor is in a low power mode (paragraph 17), determining if the processor is to be

awakened (this is inherent in that the WWAN module wakes up the processor or

alternatively, one of ordinary skill in the art at the time the invention was made would

have understood that the WWAN module was filtering and determining because it ultimately wakes up the processor in response to receiving a network event) and wherein to awaken the processor includes to transition the processor from the low power mode to a normal power mode (paragraph 20).

The rejections of claims 1, 9, 18-10, 14-15, and 28 are hereby incorporated. Tosey discloses all the elements of independent claim 23, including an apparatus, comprising: an antenna to receive wireless wide area network signals (this is inherent in view of the WWAN module receiving various network events as in paragraph 20); and a signal line (this is also inherent based on the WWAN waking up the processor in paragraph 20) to send wake up signal to a processor to awaken the processor from a low power mode when the WWAN signal handling logic determines that the processor is to be awakened (this is inherent in that the WWAN module wakes up the processor or alternatively, one of ordinary skill in the art at the time the invention was made would have understood that the WWAN module had logic that was determining because it ultimately wakes up the processor in response to receiving a network event as taught in paragraph 20).

Tosey also discloses all the elements of claim 6, including wherein the WWAN module is normally on. See paragraph 16.

Tosey also discloses all the elements of claims 7-8, 16-17, and 25-26, including wherein the WWAN module includes a dedicated battery or receives power from a power source used by the processor to enable it to be normally on. The dedicated battery is inherent based on the electrical decoupling of the WWAN module from the

processor so that the processor may go to sleep. Alternatively, one of ordinary skill in the art at the time the invention was made would understand that the WWAN module may also use a power source used by the processor as paragraph 17 indicates there is a possible power management sub-system.

Tosey teaches all the elements of claim 24, including, a power source to enable receiving the WWAN signals continuously. See above.

Tosey also teaches all the elements of claim 22, including wherein the WWAN signals include short message service messages. See paragraph 3, which teaches SMS as a standard way to wake up a device. It would have been obvious to one of ordinary skill in the art at the time the invention was made to understand that SMS would be used to in the WWAN signals because it is a well known method of paging a device to wake up.

5.   Claims 2-5, 10-13, 20-21, 27, 29-30 rejected under 35 U.S.C. 103(a) as being unpatentable over Tosey in view of U.S. Patent Application Publication No. 2004/0128310 to Zmudzinski et al.

Tosey teaches all the elements/steps of claims 2, 4, 10, 12, and 27 including awakening the processor (paragraph 20). However, Tosey does not teach determining if the processor is to be awakened, including determining if the action can be delayed. However, Tosey does discuss a queue in paragraph 18 and Zmudzinski teaches a method of holding traffic (such as SMS) for a sleeping device until a determined time period. See paragraph 17. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify the method and system of

Tosey to include the functionality of holding network traffic until a given time in order

save battery life and to allow the sleeping device to wake up first. See Zmudzinski,

paragraph 16.

In view of the above, Tosey in view of Zmudzinski teach all the elements of

claims 20-21, including the WWAN module includes a memory which determines that

the processor is not to be awakened and that the signals are to be performed at a

subsequent time when the processor is in the normal power mode. It is implicit that the

WWAN module has a memory, for example, in paragraph 18 a queue is discussed,

therefore it would have been obvious to one of ordinary skill in the art at the time the

invention was made to understand that while Zmudzinski teaches that the traffic is held

at a network device, this network device could be the WWAN module of Tosey because

the WWAN module of Tosey has a memory and is part of a network.

Also in view of above, Tosey in view of Zmudzinski also teach all the

element/steps of claims 5, 13, and 29-30, including the WWAN signal includes SMS

messages (Zmudzinski, paragraphs 22 and 17, and Tosey, paragraph 3) and that the

WWAN includes queuing the SMS messages (see above discussion) and wherein the

SMS message are first stored in a SMC and then forwarded to the WWAN module (this

would have been obvious to one of ordinary skill in the art at the time the invention was

made because as taught by Zmudzinski, the traffic may be held at a network device

(paragraph 17) and then forwarded to the WWAN module of Tosey (paragraph 20).

As to claims 3 and 11, the elements of these claims have been addressed above.

6.   Claims 1-14, 18-21, and 23-27 are rejected under 35 U.S.C. 103(a) as being

obvious over Tosey in view of U.S. Patent Application Publication No 2003/0179725 to

Lo et al.

The applied reference has a common assignee with the instant application.

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art

only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome

by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in

the reference was derived from the inventor of this application and is thus not an

invention "by another"; (2) a showing of a date of invention for the claimed subject

matter of the application which corresponds to subject matter disclosed but not claimed

in the reference, prior to the effective U.S. filing date of the reference under 37 CFR

1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and

reference are currently owned by the same party and that the inventor named in the

application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer

in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing

that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under

35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

Tosey teaches all the elements of the listed claims as discussed above.

However, Lo teaches a method filtering incoming traffic in order to determine if a mobile

station should be woken up from a sleep mode. See paragraphs 19 to 24. Therefore, it

would have been obvious to one of ordinary skill in the art at the time the invention was

made, to modify Tosey to include the filtering method taught by Lo because it prevents

unnecessary power consumption. See Lo, paragraph 21.

Response to Arguments

7.   The objection to the declaration is withdrawn.

8.   The above rejections have been maintained, however, slight modifications have

been made in order to further clarify them.

9.   Applicant's arguments filed October 31, 2005 have been fully considered but they

are not persuasive.

10.   Applicant primarily argues that Tosey teaches a processor that awakens

periodically from sleep to poll a WWAN module and cites Figure 3, specifically steps

306, 308, and 310. See page 4 of Remarks filed October 31, 2005. However, as

disclosed in paragraph 20 and further in paragraph 27 of Tosey, Tosey teaches that the

WWAN module receives a signal from a server and wakes up the appliance (processor)

using a "RING" signal. This is further shown in Figure 3 in steps 310, 314, and 306.

Therefore, Tosey does in fact disclose/teach the claimed invention.

11.   Applicant also argues that the processor in Tosey must poll the WWAN module

to determine if it should be awaken from sleep and that nowhere in Tosey is there any

teaching of waking the processor with the WWAN module. However, as indicated

above, this is not accurate. The WWAN module receives a signal from a server and

uses a RING signal to awaken the processor. See paragraphs 20 and 27.

12.   Applicant also argues that Zmudzinski individually does not teach or suggest a

module to store messages at a computing device and waking a processor when

required. However, the Examiner is citing Zmudzinski for teaching the concept of *optionally* holding/delaying messages, such as SMS messages for a sleeping device for, in one case, a specific time to allow the device to wake up. See paragraphs 16 to 17. This teaching, which suggests a determining action regarding whether to delay a message or not, in combination with the WWAN queue taught in paragraph 18 of Tosey and the knowledge of one of ordinary skill in the art at the time the invention was made, render the above cited claims obvious because as Zmudzinski teaches, holding messages to allow a device to stay asleep/in a low powered state allows for battery life savings.

13.   Finally, Applicant argues that Lo teaches an access point 70 in Figure 2, which enters into a sleep mode and awakens when any message is passed to it. However, Lo actually teaches an access point 14b (element 70 is a piece of software), see paragraph 18), which includes a filter program that filters packets of data that would unnecessarily awaken a host (processor) 18. See paragraph 21. The Examiner submits that the combination of the filtering method taught by Lo with the elements taught by Tosey, as discussed above, teaches all the elements of the indicated claims in paragraph 6 above, because one of ordinary skill in the art at the time the invention was made would have understood that this combination would prevent unnecessary power consumption as taught by Lo in paragraph 21.

Conclusion

14.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julie E. Stein, Esq. whose telephone number is (571) 272-7897. The examiner can normally be reached on M-F (8:30 am-5:00 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on (571) 272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JES

GEORGE ENG
SUPERVISORY PATENT EXAMINER